



BILLING CODE 3510-22-P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

RIN 0648-XD105

Small Takes of Marine Mammals Incidental to Specified Activities; Cape Wind's High Resolution Survey in Nantucket Sound, MA

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice; proposed incidental harassment authorization; request for comments.

SUMMARY: NMFS has received an application from Cape Wind Associates (CWA) for an Incidental Harassment Authorization (IHA) to take marine mammals, by harassment, incidental to pre-construction high resolution survey activities. CWA began pre-construction activities in 2012, but was unable to complete the entire survey. Pursuant to the Marine Mammal Protection Act (MMPA), NMFS is requesting comments on its proposal to issue an IHA to CWA to incidentally take, by Level B harassment only, marine mammals during the specified activity.

DATES: Comments and information must be received no later than [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: Comments on the application and this proposal should be addressed to Jolie Harrison, Incidental Take Program Supervisor, Permits and Conservation Division, Office of Protected Resources, National Marine Fisheries Service, 1315 East-West Highway, Silver Spring, MD 20910. The mailbox address for providing email comments is

ITP.Magliocca@noaa.gov. Comments sent via e-mail, including all attachments, must not

exceed a 25-megabyte file size. NMFS is not responsible for comments sent to addresses other than those provided here.

Instructions: All comments received are a part of the public record and will generally be posted to <http://www.nmfs.noaa.gov/pr/permits/incidental.htm> without change. All Personal Identifying Information (for example, name, address, etc.) voluntarily submitted by the commenter may be publicly accessible. Do not submit Confidential Business Information or otherwise sensitive or protected information.

An electronic copy of the application may be obtained by visiting the internet at: <http://www.nmfs.noaa.gov/pr/permits/incidental.htm>. The following associated documents are also available at the same internet address: 2011 Environmental Assessment, 2012 monitoring report. Documents cited in this notice may also be viewed, by appointment, during regular business hours, at the aforementioned address.

FOR FURTHER INFORMATION CONTACT: Michelle Magliocca, Office of Protected Resources, NMFS, (301) 427-8401.

SUPPLEMENTARY INFORMATION:

Background

Sections 101(a)(5)(A) and (D) of the MMPA (16 U.S.C. 1361 et seq.) direct the Secretary of Commerce to allow, upon request, the incidental, but not intentional, taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specific geographical region if certain findings are made and either regulations are issued or, if the taking is limited to harassment, a notice of a proposed authorization is provided to the public for review.

Authorization for incidental takings shall be granted if NMFS finds that the taking will have a negligible impact on the species or stock(s), will not have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses (where relevant), and if the permissible methods of taking and requirements pertaining to the mitigation, monitoring, and reporting of such takings are set forth. NMFS has defined "negligible impact" in 50 CFR 216.103 as "an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival."

Except with respect to certain activities not pertinent here, the MMPA defines "harassment" as: any act of pursuit, torment, or annoyance which (i) has the potential to injure a marine mammal or marine mammal stock in the wild [Level A harassment]; or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering [Level B harassment].

Summary of Request

On December 20, 2013, NMFS received an application from CWA for the taking of marine mammals incidental to high resolution survey activities. NMFS determined that the application was adequate and complete on December 20, 2013.

CWA proposes to conduct a high resolution geophysical survey in Nantucket Sound, Massachusetts. The proposed activity would occur during daylight hours over an estimated 109-day period beginning in April 2014. The following equipment used during the survey is likely to result in the take of marine mammals: shallow-penetration subbottom profiler and medium-

penetration subbottom profiler. Take, by Level B harassment only, of individuals of five species is anticipated to result from the specified activity.

NMFS issued CWA an IHA in 2011 (76 FR 80891, December 27, 2011) for survey work that was to be completed in 2012. However, subsequent to the issuance of that IHA, CWA found it necessary to divide their survey into two seasons. They completed approximately 20 percent of the survey in 2012 and obtained a second IHA to conduct the remaining 80 percent in 2013 (78 FR 19217, March 29, 2013). Due to scheduling adjustments, the work was not conducted in 2013 and this request is an extension of the original request. CWA is not proposing to change their survey activities in any way. However, the geotechnical portion of the survey was completed in 2012 and would not be continued during the 2014 season.

Description of the Specified Activity

CWA proposes to conduct a high resolution geophysical survey in order to acquire remote-sensing data around Horseshoe Shoal which would be used to characterize resources at or below the seafloor. The purpose of the survey would be to identify any submerged cultural resources that may be present and to generate additional data describing the geological environment within the survey area. The survey would satisfy the mitigation and monitoring requirements for “cultural resources and geology” in the environmental stipulations of the Bureau of Ocean Energy Management’s lease. The survey is part of the first phase of a larger Cape Wind energy project, which involves the installation of 130 wind turbine generators on Horseshoe Shoal over a 2-year period. The survey would collect data along predetermined track lines using a towed array of instrumentation, which would include a side scan sonar, magnetometer, shallow-penetration subbottom profiler, multibeam depth sounder, and medium-

penetration subbottom profiler. The proposed high resolution geophysical survey activities would not result in any disturbance to the sea floor.

Dates and Duration

Survey activities are necessary prior to construction of the wind turbine array and are scheduled to begin in the spring of 2014, continuing on a daily basis for up to five months. Survey vessels would operate during daytime hours only and CWA estimates that one survey vessel would cover about 17 nautical miles (31 kilometers) of track line per day. Therefore, CWA conservatively estimates that survey activities would take 109 days (28 days less than what was expected under the 2012 IHA). However, if more than one survey vessel is used, the survey duration would be considerably shorter. NMFS is proposing to issue an authorization that extends from April 1, 2014, to March 31, 2015.

Specified Geographic Region

Survey vessels are expected to depart from Falmouth Harbor, Massachusetts, or another nearby harbor on Cape Cod. In total, the survey would cover approximately 110 square kilometers (km²). This area includes the future location of the wind turbine generators – an area about 8.4 km from Point Gammon, 17.7 km from Nantucket Island, and 8.9 km from Martha's Vineyard – and cables connecting the wind park to the mainland. The survey area within the wind park would be transited by survey vessels towing specialized equipment along primary track lines and perpendicular tie lines. Preliminary survey designs include primary track lines with northwest-southeast orientations and assume 30-meter (m) line spacing. Preliminary survey designs also call for tie lines to likely run in a west-east orientation covering targeted areas of the construction footprint where wind turbine generators would be located. The survey area along the interconnecting submarine cable route includes a construction and anchoring corridor, as part

of the wind farm's area of potential effect. The total track line distance covered during the survey is estimated to be about 3,432 km (as opposed to the 4,292 km included in the 2012 IHA).

Multiple survey vessels may operate within the survey area and would travel at about 3 knots during data acquisition and approximately 15 knots during transit between the survey area and port. If multiple vessels are used at the same time, they would be far enough apart that sounds from the chirp and boomer would not overlap. The survey vessels would acquire data continuously throughout the survey area during the day and terminate survey activities before dark, prior to returning to port. NMFS believes that the likelihood of a survey vessel striking a marine mammal is low considering the low marine mammal densities within Nantucket Sound, the relatively short distance from port to the survey site, the limited number of vessels, and the small vessel size. Vessel sounds during survey activities would result from propeller cavitations, propeller singing, propulsion, flow noise from water dragging across the hull, and bubbles breaking in the wake. The dominant sound source from vessels would be from propeller cavitations; however, sounds resulting from survey vessel activity are considered to be no louder than the existing ambient sound levels and sound generated from regular shipping and boating activity in Nantucket Sound (MMS, 2009).

Detailed Description of Activities

NMFS expects that acoustic stimuli resulting from the operation of the survey equipment have the potential to harass marine mammals. Background information on the characteristics and measurement of sound were provided in the 2013 proposed IHA notice (78 FR 7402, February 1, 2013) and have not changed. The dominant sources of sound during the proposed survey activities would be from the towed equipment used to gather seafloor data. Two of the seismic survey devices used during the high resolution geophysical survey emit sounds within

the hearing range of marine mammals in Nantucket Sound: shallow-penetration and medium-penetration subbottom profilers (known as a “chirp” and “boomer,” respectively). CWA would use a chirp to provide high resolution data of the upper 15 m of sea bottom. An EdgeTech 216S or similar model would be used. The chirp would be towed near the center of the survey vessel directly adjacent to the gunwale of the boat, about 1 to 1.5 m beneath the water’s surface. Sources such as the chirp are considered non-impulsive, intermittent (as opposed to continuous) sounds. The frequency range for this instrument is generally 2 to 16 kilohertz (kHz) – a range audible by all marine mammal species in Nantucket Sound. The estimated sound pressure level at the source would be 201 dB re 1 μ Pa at 1 m with a typical pulse length of 32 milliseconds and a pulse repetition rate of 4 per second. NMFS does not consider the chirp to be a continuous sound source (best represented by vibratory pile driving or drilling). CWA would use a boomer to obtain deeper resolution of geologic layering that cannot be imaged by the chirp. An AP3000 (dual plate) boomer, or similar model would be used. The boomer would be towed about 3 to 5 m behind the survey vessel’s stern at the water’s surface. Unlike the chirp, the boomer emits an impulse sound, characterized by a relatively rapid rise-time to maximum pressure followed by a period of diminishing and oscillating pressures (Southall et al., 2007). The boomer has a broad frequency range of 0.3 to 14 kHz – a range audible by all marine mammal species in Nantucket Sound. CWA performed sound source verification monitoring in 2012 on the type of chirp and boomer that would be used during the 2014 survey season. Underwater sound was recorded with two Autonomous Multichannel Acoustic Recorders, deployed 100 m apart, in the vicinity of the project area. The received 90-percent rms sound pressure levels (SPLs) from the subbottom profilers did not exceed 175 dB re 1 μ Pa. The loudest source, the dual-plate boomer, produced a

received 90-percent rms SPL of less than 140 dB re 1 uPa at a 500-m range. The distance to the 160-dB isopleth was 12 m for the dual-plate boomer and 10 m for the chirp.

Description of Marine Mammals in the Area of the Specified Activity

All marine mammals with possible or confirmed occurrence in the proposed activity area are listed in Table 1, along with their status under the Endangered Species Act (ESA) and MMPA. In general, large whales do not frequent Nantucket Sound, but they are discussed below because some species have been reported near the project vicinity.

Table 1. Marine mammals with possible or confirmed occurrence in the proposed activity area.

Common Name	Scientific Name	ESA Status	MMPA Status
Humpback whale	<u>Megaptera novaeangliae</u>	endangered	depleted
Fin whale	<u>Balaenoptera physalus</u>	endangered	depleted
North Atlantic right whale	<u>Eubaelena glacialis</u>	endangered	depleted
Minke whale	<u>Balaenoptera acutorostrata</u>	-	-
Atlantic white-sided dolphin	<u>Lagenorhynchus acutus</u>	-	-
Harbor porpoise	<u>Phocoena phocoena</u>	-	-
Gray seal	<u>Halichoerus grypus</u>	-	-
Harbor seal	<u>Phoca vitulina</u>	-	-

Sightings data indicate that whales rarely visit Nantucket Sound and there are no sightings of large whales on Horseshoe Shoal. Since 2002, no humpback whales have been observed anywhere in Nantucket Sound and there are no documented occurrences of fin whales within Nantucket Sound. Right whales are considered rare in Nantucket Sound and have not been sighted on Horseshoe Shoal. All of the right whales observed in Nantucket Sound during 2010 quickly transited the area and there is no evidence of any persistent aggregations around the proposed project area. The best available science indicates that humpback whales, fin whales, and right whales – although present in the New England region – are rare in Nantucket Sound

and transient individuals may be occasionally found 20 km from the proposed project area; this is likely due to the shallow depths of Nantucket Sound and its location outside of the coastal migratory corridor.

Likewise, sightings data shows no record of long-finned pilot whales, striped dolphins, Atlantic spotted dolphins, common dolphins, Risso's dolphins, Kogia species, harp seals, or hooded seals in Nantucket Sound, although these stocks exist in the New England region. Therefore, CWA is neither requesting nor is NMFS proposing to authorize take of the aforementioned species.

Marine mammals with known occurrences in Nantucket Sound that could be harassed by high resolution geophysical survey activity in Nantucket Sound are listed in Table 2. These are the species for which take is being requested. Information on each species is summarized below. Further information on the biology and local distribution of these species and others in the region can be found in CWA's application, which is available online at:

<http://www.nmfs.noaa.gov/pr/permits/incidental.htm#applications>, and the NMFS Marine Mammal Stock Assessment Reports, which are available online at:

<http://www.nmfs.noaa.gov/pr/species>.

Table 2. Marine mammals that could be impacted by survey activities in Nantucket Sound.

Common Name	Scientific Name	Abundance	Population Status	Time of Year in New England
Minke whale	<u>Balaenoptera</u> <u>actuorostrata</u>	20,741	n/a	April through October
Atlantic white-sided dolphin	<u>Lagenorhynchus</u> <u>acutus</u>	48,819	n/a	October through December
Harbor porpoise	<u>Phocoena</u> <u>phocoena</u>	79,883	n/a	Year-round (peak Sept-Apr)
Gray seal	<u>Halichoerus</u> <u>grypis</u>	348,900	increasing	Year-round

Harbor seal	<u>Phoca vitulina</u>	99,340	n/a	October through April
-------------	-----------------------	--------	-----	-----------------------

Minke Whales

In the North Atlantic, minke whales are found from Canada to the Gulf of Mexico and concentrated in New England waters, particularly in the spring and summer months. Minke whales found in Nantucket Sound are part of the Canadian East Coast stock, which runs from the Davis Strait down to the Gulf of Mexico. The best available abundance estimate for this stock is 20,741 individuals. Sightings data indicate that minke whales prefer shallower waters when in the Cape Cod vicinity, but depths significantly greater than Nantucket Sound. Sightings per unit effort estimates for Nantucket Sound are 0.1 to 5.9 minke whales per 1,000 km of survey track for spring and summer. However, estimates may be biased due to heavier whale watching activities during those months. Minke whales are one of the most abundant whale species in the world and their population is considered stable throughout. The minke whale is not listed under the ESA or considered strategic under the MMPA.

Atlantic White-sided Dolphin

Atlantic white-sided dolphins are found in temperate and sub-polar waters of the North Atlantic, typically along the continental shelf and slope. In the western North Atlantic, they are found from North Carolina to Greenland. During summer months, Atlantic white-sided dolphins move north and closer to shore. Atlantic white-sided dolphins are rare in Nantucket Sound, but are found in deeper waters around Massachusetts and Rhode Island. In 2012, the estimated population size of the Western North Atlantic stock was about 48,819 animals. There is insufficient data to determine population trends, but Atlantic white-sided dolphins are not listed under the ESA, although they are considered strategic under the MMPA.

Harbor Porpoises

Harbor porpoises have a wide and discontinuous range that includes the North Atlantic and North Pacific. In the western North Atlantic, harbor porpoises are found from Greenland to Cape Hatteras, North Carolina. Harbor porpoises in U.S. waters are divided into 10 stocks, based on genetics, movement patterns, and management. Any harbor porpoises encountered during the proposed survey activities would be part of the Gulf of Maine/Bay of Fundy stock which has an estimated abundance of 79,883 animals. They congregate around the Gulf of Maine during summer months, but are otherwise dispersed along the east coast. No trend analyses exist for this species. Harbor porpoises are not listed under the ESA, although they are considered strategic under the MMPA.

Gray Seals

Gray seals inhabit temperate and sub-arctic waters. They are found from Maine to Long Island Sound, live on remote, exposed islands, shoals, and unstable sandbars, and are the second most common pinniped along the U.S. Atlantic coast. Three major populations exist in eastern Canada, northwestern Europe, and the Baltic Sea. The western North Atlantic stock is equivalent to the eastern Canada population and ranges from New York to Labrador. Pupping occurs on land or ice from late December through mid-February with peaks in mid-January. Muskeget Island (located between Martha's Vineyard and Nantucket Island) and Monomoy Island (at the eastern limit of Nantucket Sound) are the only gray seal breeding colonies in the U.S. and the southernmost gray seal breeding colonies in the world. These breeding colonies are about 24 km and 14 km from the proposed project site, respectively. Gray seals presently use the islands as areas to give birth and raise their pups. There is no defined migratory behavior for gray seals, so a large portion of the population may be present in Nantucket Sound year-round.

Some adults move north during spring and summer, out of Nantucket Sound to the waters off Maine and Canada, but others have been observed in high abundance in Chatham Harbor, MA and other areas of lower Cape Cod during this time.

Incidental observations of seals were recorded during avian aerial surveys conducted independently by CWA and the Massachusetts Audubon Society. Between May 2002 and February 2004, CWA conducted about 46 aerial avian surveys in Nantucket Sound, with particular focus on Horseshoe Shoal. During this time, about 26,873 seals were observed throughout Nantucket Sound; about 56 of these were observed within the proposed project area over the three-year period. The current abundance estimate for the western North Atlantic stock is 348,900 animals. Gray seal numbers are increasing in coastal waters between southern Massachusetts and eastern Long Island. Their abundance is likely increasing throughout the western Atlantic, but the rate of increase is unknown. Gray seals are not listed under the ESA or considered strategic under the MMPA.

Harbor Seals

Harbor seals, also known as common seals, are found throughout coastal waters of the Atlantic Ocean and considered the most abundant pinniped on the U.S. east coast. The best available estimate for the harbor seal population along the New England coast is 99,340 (NMFS, 2011). They are most common around coastal islands, ledges, and sandbars above 30° N latitude and range from the Arctic down to Nantucket Sound. Harbor seals are seasonal visitors to Massachusetts; breeding and pupping occur through the spring and summer in Maine and Canada. Harbor seals typically over-winter in Massachusetts, but some remain in southern New England year-round. No pupping areas have been identified in southern New England.

Extensive sand spits off Muskeget Island and neighboring Tuckernuck and Skiff Islands have been identified as preferred haul-out spots for large numbers of harbor seals.

Harbor seal abundance estimates for Nantucket Sound are scarce. Barlas (1999) observed harbor seals on Cape Cod from October through April and saw abundance peak in March, with very few individuals using haul-out sites in Nantucket Sound. Waring (unpublished data, 2002) observed an increased abundance of harbor seals on Muskeget Island, Monomoy Island, and Tuckernuck Island in 1999 and 2000; however, harbor seals are not likely to be in the same area when gray seals are breeding.

Potential Effects of the Specified Activity on Marine Mammals

This section includes a summary and discussion of the ways that the types of stressors associated with the specified activity have been observed to impact marine mammals. This discussion may also include reactions that we equate with a take and those that we do not equate with a take (for example, with acoustics, we may include a discussion of studies that showed animals not reacting at all to sound or exhibiting barely measureable avoidance). This section also provides background information concerning potential effects of the specified activity, but does not consider either the specific manner in which the activity will be carried out or the mitigation that will be implemented, and how either of these will influence the anticipated impacts from this specific activity. The “Estimated Take by Incidental Harassment” section later in this document will include a quantitative analysis of the number of individuals that we expect to be taken by this activity. The “Negligible Impact Analysis” section will include the analysis of how this specific activity will impact marine mammals and will consider the content of this section, the “Estimated Take by Incidental Harassment” section, the “Proposed Mitigation” section, and the “Anticipated Effects on Marine Mammal Habitat” section to draw conclusions

regarding the likely impacts of this activity on the reproductive success or survivorship of individuals and from that on the affected marine mammal populations or stocks.

Use of subbottom profilers on Horseshoe Shoal may temporarily impact marine mammal behavior within the survey area due to elevated in-water sound levels. Marine mammals are continually exposed to many sources of sound. Naturally occurring sounds such as lightning, rain, sub-sea earthquakes, and biological sounds (for example, snapping shrimp, whale songs) are widespread throughout the world's oceans. Marine mammals produce sounds in various contexts and use sound for various biological functions including, but not limited to: (1) social interactions; (2) foraging; (3) orientation; and (4) predator detection. Interference with producing or receiving these sounds may result in adverse impacts. Audible distance, or received levels of sound depend on the nature of the sound source, ambient noise conditions, and the sensitivity of the receptor to the sound (Richardson et al., 1995). Type and significance of marine mammal reactions to sound are likely dependent on a variety of factors including, but not limited to, (1) the behavioral state of the animal (for example, feeding, traveling, etc.); (2) frequency of the sound; (3) distance between the animal and the source; and (4) the level of the sound relative to ambient conditions (Southall et al., 2007).

Background information on sound, marine mammal hearing, and potential effects of the specified activity on marine mammals (i.e., hearing impairment, threshold shift, and behavioral disturbance) was provided in the 2013 proposed IHA notice 78 FR 7402 (February 1, 2013) and that information has not changed.

Anticipated Effects on Marine Mammal Habitat

The high resolution geophysical survey equipment would not come in contact with the seafloor and would not be a source of air or water pollution. Marine mammals may avoid the

survey area temporarily due to ensonification, but survey activities are not expected to result in long-term abandonment of marine mammal habitat. A negligible area of seafloor would be temporarily disturbed during the collection of geotechnical data. The proposed activity is not expected to have any effects on important marine mammal habitat.

Proposed Mitigation

In order to issue an incidental take authorization under section 101(a)(5)(D) of the MMPA, NMFS must prescribe, where applicable, the permissible methods of taking pursuant to such activity, and other means of effecting the least practicable impact on such species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of such species or stock for taking for subsistence uses (where relevant).

CWA proposed, with NMFS' guidance, the following mitigation measures to help ensure the least practicable adverse impact on marine mammals:

Establishment of an Exclusion Zone

During all survey activities involving the shallow-penetration and medium-penetration subbottom profilers, CWA would establish a 500-m radius exclusion zone around each survey vessel. This area would be monitored for marine mammals 60 minutes (as stipulated by the BOEMRE lease) prior to starting or restarting surveys, and during surveys, and 60 minutes after survey equipment has been turned off. Typically, the exclusion zone is based on the area in which marine mammals could be exposed to injurious (Level A) levels of sound. CWA's lease specifies a 500-m exclusion zone, which exceeds both the estimated Level A and Level B isopleths for marine mammal harassment. Thus, CWA's proposed exclusion zone would

minimize impacts to marine mammals from increased sound exposures. Finally, the exclusion zone must not be obscured by fog or poor lighting conditions.

Shut Down and Delay Procedures

If a protected species observer sees a marine mammal within or approaching the exclusion zone prior to the start of surveying, the observer would notify the appropriate individual who would then be required to delay surveying (i.e., not initiate any sound sources that could result in the harassment of marine mammals) until the marine mammal moves outside of the exclusion zone or if the animal has not been resighted for 60 minutes. If a protected species observer sees a marine mammal within or approaching the exclusion zone during survey activities, the observer would notify the appropriate individual who would then be required to shut down the relevant sound sources until the marine mammal moves outside of the exclusion zone or if the animal has not been resighted for 60 minutes.

Soft-start Procedures

A “soft-start” technique would be used at the beginning of survey activities each day (or following a shut down of the relevant sound sources) to allow any marine mammal that may be in the immediate area to leave before the sound sources reach full energy. Sound sources shall not commence at nighttime or when the exclusion zone cannot be effectively monitored.

Mitigation Conclusions

NMFS has carefully evaluated the applicant’s proposed mitigation measures and considered a range of other measures to ensure that NMFS prescribes the means of effecting the least practicable impact on the affected marine mammal species and stocks and their habitat. Our evaluation of potential measures included consideration of the following factors in relation to one another:

- The manner in which, and the degree to which, the successful implementation of the measure is expected to minimize adverse impacts to marine mammals
- The proven or likely efficacy of the specific measure to minimize adverse impacts as planned
- The practicability of the measure for applicant implementation

Any mitigation measures(s) prescribed by NMFS should be able to accomplish, have a reasonable likelihood of accomplishing (based on current science), or contribute to the accomplishment of one or more of the general goals listed below:

1. Avoidance or minimization of injury or death of marine mammals wherever possible (goals 2, 3, and 4 may contribute to this goal)
2. A reduction in the numbers of marine mammals (total number or number at biologically important time or location) exposed to received levels of underwater impulse sounds, or other activities expected to result in the take of marine mammals (this goal may contribute to 1, above, or to reducing harassment takes only)
3. A reduction in the number of times (total number or number at biologically important time or location) individuals would be exposed to received levels of impulse sound, or other activities expected to result in the take of marine mammals (this goal may contribute to 1, above, or to reducing harassment takes only)
4. A reduction in the intensity of exposures (either total number or number at biologically important time or location) to received levels of impulse sound, or other activities expected to result in the take of marine mammals (this goal may contribute to 1, above, or to reducing the severity of harassment takes only)

5. Avoidance or minimization of adverse effects to marine mammal habitat, paying special attention to the food base, activities that block or limit passage to or from biologically important areas, permanent destruction of habitat, or temporary destruction/disturbance of habitat during a biologically important time
6. For monitoring directly related to mitigation – an increase in the probability of detecting marine mammals, thus allowing for more effective implementation of the mitigation

Based on our evaluation of the applicant's proposed measures, as well as other measures considered by NMFS, we have preliminarily determined that the proposed mitigation measures provide the means of effecting the least practicable adverse impacts on marine mammals species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance.

Proposed Monitoring and Reporting

In order to issue an incidental take statement for an activity, section 101(a)(5)(D) of the MMPA states that NMFS must set forth, where applicable, "requirements pertaining to the monitoring and reporting of such taking." The MMPA implementing regulations at 50 CFR 216.104 (a)(13) indicate that requests for incidental take authorizations must include the suggested means of accomplishing the necessary monitoring and reporting that will result in increased knowledge of the species and of the level of taking or impacts on populations of marine mammals that are expected to be present in the proposed action area. CWA submitted a marine mammal monitoring plan as part of the IHA application, which can be found in section 12 of CWA's application. The plan may be modified or supplemented based on comments or new information received from the public during the public comment period.

Monitoring measures prescribed by NMFS should accomplish one or more of the following general goals:

- An increase in the probability of detecting marine mammals, both within the mitigation zone (thus allowing for more effective implementation of the mitigation) and in general to generate more data to contribute to the analyses mentioned below
- An increase in our understanding of how many marine mammals are likely to be exposed to levels of **impulse sound** that we associate with specific adverse effects, such as behavioral harassment, TTS, or PTS
- An increase in our understanding of how marine mammals respond to stimuli expected to result in take and how anticipated adverse effects on individuals (in different ways and to varying degrees) may impact the population, species, or stock (specifically through effects on annual rates of recruitment or survival) through any of the following methods:
 - Behavioral observations in the presence of stimuli compared to observations in the absence of stimuli (need to be able to accurately predict received level, distance from source, and other pertinent information)
 - Physiological measurements in the presence of stimuli compared to observations in the absence of stimuli (need to be able to accurately predict received level, distance from source, and other pertinent information)
 - Distribution and/or abundance comparisons in times or areas with concentrated stimuli versus times or areas without stimuli
- An increased knowledge of the affected species

- An increase in our understanding of the effectiveness of certain mitigation and monitoring measures

Visual Monitoring

CWA would designate at least one biologically-trained, on-site individual, approved in advance by NMFS, to monitor the area for marine mammals 60 minutes before, during, and 60 minutes after all survey activities and call for shut down of the sound source if any marine mammal is observed within or approaching the designated 500-m exclusion zone. Should a marine mammal not included in an incidental take authorization be observed at any time within the 500-m exclusion zone, shut down and delay procedures would be followed.

CWA would also provide additional monitoring efforts that would result in increased knowledge of marine mammal species in Nantucket Sound. At least one NMFS-approved protected species observer would conduct behavioral monitoring from the survey vessel for two days, every 14 days of survey activity, to estimate take and evaluate the behavioral impacts that survey activities have on marine mammals outside of the 500-m exclusion zone. In addition, CWA would also deploy an additional vessel with a NMFS-approved protected species observer to collect data on species presence and behavior before surveys begin and once a month during survey activities.

Protected species observers would be provided with the equipment necessary to effectively monitor for marine mammals (for example, high-quality binoculars, compass, and range-finder) in order to determine if animals have entered the harassment isopleths and to record marine mammal sighting information. Protected species observers must be able to effectively monitor the 500-m exclusion zone whenever the subbottom profilers are in use.

Survey efforts would only take place during daylight hours and visibility must not be obscured by fog, lighting conditions, etc.

Reporting Measures

CWA would submit a report to NMFS within 90 days of expiration of the IHA or completion of surveying, whichever comes first. The report would provide full documentation of methods, results, and interpretation pertaining to all monitoring. More specifically, the report would include the following information when a marine mammal is sighted:

- Dates, times, locations, heading, speed, weather, sea conditions (including Beaufort sea state and wind force), and associated activities during all survey operations and marine mammal sightings;
- Species, number, location, distance from the vessel, and behavior of any marine mammals, as well as associated survey activity (number of shut-downs or delays), observed throughout all monitoring activities;
- An estimate of the number (by species) of marine mammals that are known to have been exposed to the survey activity (based on visual observation) at received levels greater than or equal to 160 dB re 1 uPa (rms) and/or 180 dB re 1 uPa (rms) for cetaceans and 190 dB re 1 uPa (rms) for pinnipeds with a discussion of any specific behaviors those individuals exhibited; and
- A description of the implementation and effectiveness of the mitigation measures of the IHA.

In the unanticipated event that the specified activity clearly causes the take of a marine mammal in a manner prohibited by the IHA, such as an injury (Level A harassment), serious injury, or mortality (e.g., ship-strike, gear interaction, and/or entanglement), CWA would

immediately cease the specified activities and report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, at 301-427-8401 and/or by email to Jolie.Harrison@noaa.gov and Michelle.Magliocca@noaa.gov and the Northeast Regional Stranding Coordinator at 978-281-9300 (Mendy.Garron@noaa.gov). The report must include the following information:

- Time, date, and location (latitude/longitude) of the incident;
- Name and type of vessel involved;
- Vessel's speed during and leading up to the incident;
- Description of the incident;
- Status of all sound source use in the 24 hours preceding the incident;
- Water depth;
- Environmental conditions (e.g., wind speed and direction, Beaufort sea state, cloud cover, and visibility);
- Description of all marine mammal observations in the 24 hours preceding the incident;
- Species identification or description of the animal(s) involved;
- Fate of the animal(s); and
- Photographs or video footage of the animal(s) (if equipment is available).

Activities may not resume until NMFS is able to review the circumstances of the unauthorized take. NMFS would work with CWA to determine what is necessary to minimize the likelihood of further unauthorized take and ensure MMPA compliance. CWA may not resume their activities until notified by NMFS via letter, email, or telephone.

In the event that CWA discovers an injured or dead marine mammal, and the lead PSO determines that the cause of the injury or death is unknown and the death is relatively recent (i.e.,

in less than a moderate state of decomposition as described in the next paragraph), CWA would immediately report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, at 301-427-8401 and/or by email to Jolie.Harrison@noaa.gov and Michelle.Magliocca@noaa.gov and the Northeast Regional Stranding Coordinator at 978-281-9300 (Mendy.Garron@noaa.gov). The report must include the same information identified in the paragraph above. Activities may continue while NMFS reviews the circumstances of the incident. NMFS would work with CWA to determine whether modifications in the activities are appropriate.

In the event that CWA discovers an injured or dead marine mammal, and the lead PSO determines that the injury or death is not associated with or related to the activities authorized in the IHA (e.g., previously wounded animal, carcass with moderate to advanced decomposition, or scavenger damage), CWA would report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, at 301-427-8401 and/or by email to Jolie.Harrison@noaa.gov and Michelle.Magliocca@noaa.gov and the Northeast Regional Stranding Coordinator at 978-281-9300 (Mendy.Garron@noaa.gov), within 24 hours of the discovery. CWA would provide photographs or video footage (if available) or other documentation of the stranded animal sighting to NMFS. Activities may continue while NMFS reviews the circumstances of the incident.

Monitoring Results from Previously Authorized Activities

CWA complied with the requirements under their 2012 IHA and did not conduct any activities under their 2013 IHA. CWA completed 28 days and 459 nautical transect miles of survey activity during 2012 and no living marine mammals were sighted. On July 10, 2012, a deceased harbor seal was seen by two protected species observers and survey equipment was

immediately shut down. The observers determined that the seal had been deceased for 24-48 hours, based on signs of scavenger damage and bloating, which suggest moderate decomposition (Pugliares *et al.*, 2007). Both observers concurred that the animal was not injured due to survey activities; however, a 60-minute post watch was performed to ensure that no other protected species were in the vicinity. A full report was submitted to NMFS on July 11, 2012, within 24 hours of the initial sighting. No marine mammal takes were reported during the 2012 season. CWA's monitoring report is available online at:

<http://www.nmfs.noaa.gov/pr/permits/incidental.htm#applications>.

Estimated Take by Incidental Harassment

Except with respect to certain activities not pertinent here, the MMPA defines "harassment" as: any act of pursuit, torment, or annoyance which (i) has the potential to injure a marine mammal or marine mammal stock in the wild [Level A harassment]; or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering [Level B harassment].

Based on CWA's application and NMFS' subsequent analysis, the impact of the described survey activities may result in, at most, short-term modification of behavior by small numbers of marine mammals within the action area. Marine mammals may avoid the area or change their behavior at time of exposure to elevated sound levels.

Current NMFS practice regarding exposure of marine mammals to anthropogenic sound is that in order to avoid the potential for injury of marine mammals (for example, PTS), cetaceans and pinnipeds should not be exposed to impulsive sounds of 180 and 190 dB re: 1 μ Pa or above, respectively (Level A harassment). This level is considered precautionary as it is

likely that more intense sounds would be required before injury would actually occur (Southall et al., 2007). Potential for behavioral harassment (Level B) is considered to have occurred when marine mammals are exposed to sounds at or above 160 dB re: 1 μ Pa for impulse sounds and 120 dB re: 1 μ Pa for non-pulse noise, but below the aforementioned thresholds. These levels are also considered precautionary. NMFS' current acoustic exposure criteria are summarized below in Table 3.

Table 3. NMFS' current acoustic criteria, as they pertain to the specified activity.

Non-Explosive Sound		
Criterion	Criterion Definition	Threshold
Level A Harassment (Injury)	Permanent Threshold Shift (PTS) (Any level above that which is known to cause TTS)	180 dB re 1 microPa-m (cetaceans) / 190 dB re 1 microPa-m (pinnipeds) root mean square (rms)
Level B Harassment	Behavioral Disruption (for impulse noises)	160 dB re 1 microPa-m (rms)
Level B Harassment	Behavioral Disruption (for continuous noise)	120 dB re 1 microPa-m (rms)

CWA estimated the number of potential takes resulting from survey activities by considering species density, the zone of influence, and duration of survey activities. More specifically, take estimates were calculated by multiplying the estimated species density values (n) measured in individuals per square kilometers, by the area of the zone of influence in km², times the total number of survey days (d = 109). The zone of influence was calculated as a function of the distance a survey vessel with deployed boomer would travel in one survey day and the area around the boomer where sound levels reach or exceed 160 dB. For consistency with the previous IHAs, the take estimate is based on a zone of influence equal to 444 m (the initial estimate for the 160 dB isopleth for the boomer), although based on acoustic

measurements taken at the beginning of the 2012 survey, the 160 dB isopleth is thought to be much smaller. This distance was applied consistently to all marine mammal species.

Estimated numbers of species potentially exposed to disturbing levels of sound from the boomer (the survey equipment with the largest 160 dB isopleth) were calculated for minke whales, Atlantic white-sided dolphins, harbor porpoises, gray seals, and harbor seals. These estimates were calculated by multiplying the low and high end of the ranges of species density by the boomer's zone of influence and the number of days of survey operation. CWA calculated seal density estimates based on aerial survey counts for seals observed swimming and/or foraging in open water within the activity area. CWA included an adjustment factor in these density calculations for seals not seen, but considered present during aerial surveys. Density estimates for seals based on haul out counts were not used due to the distance of haul outs from the activity area (about 20 km to Monomoy Island and 12 km to Muskeget Island). Gray seals and harbor seals congregating in these locations are not expected to hear sounds from the survey equipment at 160 dB or higher. The seals most likely to be exposed to potentially disturbing sounds are the individuals swimming and/or foraging within the zone of influence for the activated medium-penetration subbottom profiler.

CWA is requesting incidental take based on the highest estimated possible species exposures to potentially disturbing levels of sound from the boomer. No marine mammals are expected to be exposed to injurious levels of sound in excess of 180 dB during survey activities. CWA is requesting, and NMFS is proposing, Level B harassment of nine minke whales, 185 Atlantic white-sided dolphins, 110 harbor porpoises, 314 gray seals, and 79 harbor seals (Table 4). These numbers overestimate the number of animals likely to be taken because they are based on the highest density estimates and do not account for proposed mitigation measures (such as

the 500-m exclusion zone, marine mammal monitoring, and ramp up procedures). These numbers indicate the maximum number of animals expected to occur within 444 m of the boomer. Estimated and proposed level of take of each species is less than one percent of each affected stock and therefore is considered small in relation to the stock estimates previously set forth.

Table 4. Estimated take of marine mammals by the specified activity.

Common Name	Estimated Density	Estimated Take by Level B Harassment	Abundance of Stock	Percentage of Stock Potentially Affected	Population Trend
Minke whale	0.13-7.4 (species/1,000 km ²)	9	20,741	0.04%	n/a
Atlantic white-sided dolphin	0.13-164.3 (species/1,000 km ²)	185	48,819	0.38%	n/a
Harbor porpoise	0.13-98.1 (species/1,000 km ²)	110	79,883	0.01%	n/a
Gray seal	0.13-0.28 (species/km ²)	314	348,900	0.09%	increasing
Harbor seal	0.03-0.07 (species/km ²)	79	99,340	0.08%	n/a

Any impacts to marine mammal behavior from the specified activity are expected to be temporary. Animals may avoid the area around the survey vessels, thereby reducing exposure. Any disturbance to marine mammals is likely to be in the form of temporary avoidance or alteration of opportunistic foraging behavior near the survey location.

Analysis and Preliminary Determinations

Negligible Impact

Negligible impact is "an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival" (50 CFR 216.103). A negligible impact finding is based on the lack of likely adverse effects on annual rates of recruitment or survival (i.e., population-level effects). An estimate of the number of Level B harassment takes, alone, is not enough information on which to base an impact determination. In addition to considering estimates of the number of marine mammals that might be "taken" through behavioral harassment, NMFS must consider other factors, such as the likely nature of any responses (their intensity, duration, etc.), the context of any responses (critical reproductive time or location, migration, etc.), as well as the number and nature of estimated Level A harassment takes, the number of estimated mortalities, and effects on habitat.

In making a negligible impact determination, NMFS considers a number of factors which include, but are not limited to, number of anticipated injuries or mortalities (none of which would be authorized here), number, nature, intensity, and duration of Level B harassment, and the context in which takes occur (for instance, will the takes occur in an area or time of significance for marine mammals, or are takes occurring to a small, localized population?). As described above, marine mammals would not be exposed to activities or sound levels which would result in injury (for instance, PTS), serious injury, or mortality. Anticipated impacts of survey activities on marine mammals are temporary behavioral changes due to avoidance of the area. All marine mammals in the vicinity of survey operations would be transient as no breeding, calving, pupping, or nursing areas, or haul-outs, overlap with the survey area. The closest pinniped haul-outs are about 20 km and 12 km away on Monomoy Island and Muskeget Island, respectively. Marine mammals approaching the survey area would likely be traveling or

opportunistically foraging. Furthermore, the amount of take CWA requested and NMFS proposes to authorize likely overestimates the actual take that would occur; no marine mammal takes were observed during 28 days of survey activity in 2012. No affected marine mammals are listed under the ESA and only the Atlantic white-sided dolphin and harbor porpoise are considered strategic under the MMPA. Marine mammals are expected to avoid the survey area, thereby reducing exposure and impacts. No disruption to reproductive behavior is anticipated and there is no anticipated effect on annual rates of recruitment or survival of affected marine mammals.

Based on the analysis contained herein of the likely effects of the specified activity on marine mammals and their habitat, and taking into consideration the implementation of the proposed mitigation and monitoring measures, NMFS preliminarily finds that the total marine mammal take from CWA's survey activities have a negligible impact on the affected species or stocks.

Small Numbers

The amount of take CWA requested, and NMFS proposes to authorize, is considered small (less than one percent) relative to the estimated populations of 20,741 minke whales, 48,819 Atlantic white-sided dolphins, 79,883 harbor porpoises, 348,900 gray seals, and 99,340 harbor seals. Based on the analysis contained herein of the likely effects of the specified activity on marine mammals and their habitat, and taking into consideration the implementation of the mitigation and monitoring measures, NMFS preliminarily finds that small numbers of marine mammals would be taken relative to the population of the affected species or stocks.

Impact on Availability of Affected Species for Taking for Subsistence Uses

There are no relevant subsistence uses of marine mammals implicated by this action. Therefore, NMFS has determined that the total taking of affected species or stocks would not have an unmitigable adverse impact on the availability of such species or stocks for taking for subsistence purposes.

Endangered Species Act (ESA)

The proposed activity will have no effect on any ESA-listed species as none are expected to be in the action area. Therefore, NMFS has determined that a section 7 consultation under the ESA is not required.

National Environmental Policy Act (NEPA)

In compliance with the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.), as implemented by the regulations published by the Council on Environmental Quality (40 CFR parts 1500-1508), and NOAA Administrative Order 216-6, NMFS prepared an Environmental Assessment (EA). The EA includes an analysis of the direct, indirect, and cumulative effects to marine mammals and other applicable environmental resources resulting from the issuance of a 1-year IHA and the potential issuance of additional authorization for incidental harassment for the ongoing project in 2012. This analysis is still considered relevant for the proposed IHA because the applicant's proposed activity has not changed. This EA is available on the NMFS website listed in the beginning of this document.

Proposed Authorization

As a result of these preliminary determinations, NMFS proposes to issue an IHA to CWA for conducting a high resolution geophysical survey in Nantucket Sound beginning in the spring of 2014, provided the previously mentioned mitigation, monitoring, and reporting requirements are incorporated. The proposed IHA language is provided next.

This section contains a draft of the IHA itself. The wording contained in this section is proposed for inclusion in the IHA (if issued).

Cape Wind Associates, LLC (CWA), 20 Park Plaza, Suite 320, Boston, Massachusetts 02116, is hereby authorized under section 101(a)(5)(D) of the Marine Mammal Protection Act (MMPA; 16 U.S.C. 1371(a)(5)(D)) to harass small numbers of marine mammals incidental to a high resolution geophysical survey conducted in Nantucket Sound, contingent upon the following conditions:

1. This Authorization is valid from April 1, 2014, through March 31, 2015.
2. This Authorization is valid only for CWA's activities associated with the high resolution geophysical survey operations that shall occur in the following specified area: around Horseshoe Shoal in Nantucket Sound, as specified in CWA's 2013 IHA application.

3. Species Impacted and Level of Takes

(a). The incidental taking of marine mammals, by Level B harassment only, is limited to the following species in the waters of Nantucket Sound:

- (i). Minke whale (Balaenoptera actuorostrata) - 9
- (ii). Atlantic white-sided dolphin (Lagenorhynchus acutus) - 185
- (iii). Harbor porpoise (Phocoena phocoena) - 110
- (iv). Gray seal (Halichoerus grypis) – 314
- (v). Harbor seal (Phoca vitulina) – 79
- (vi). If any marine mammal species are encountered during survey activities that are not listed here for authorized taking and are likely to be exposed to sound pressure levels (SPLs) greater than or equal to 160 dB re 1 µPa (rms), then the

Holder of this Authorization must alter speed or course, power-down or shut-down survey activities to avoid take.

(b). The taking by injury (Level A harassment), serious injury, or mortality of any of the species listed in Condition 3(a) above or the taking of any other species of marine mammal is prohibited and may result in the modification, suspension, or revocation of this Authorization.

4. The methods authorized for taking, by Level B harassment only, are limited to the following acoustic sources, without an amendment to this Authorization:

(a). Shallow-penetration subbottom profiler; and

(b). Medium-penetration subbottom profiler.

5. The taking of any marine mammal in a manner prohibited under this Authorization must be reported immediately to the Chief, Permits and Conservation Division, Office of Protected Resources, National Marine Fisheries Service (NMFS) or his designee, at 301-427-8401.

6. Mitigation Requirements: The Holder of this Authorization is required to implement the following mitigation requirements when conducting the specified activities to achieve the least practicable impact on affected marine mammal species or stocks:

(a). Establishment of an exclusion zone – During all survey activities involving the shallow-penetration and medium-penetration subbottom profilers, a 500-m radius exclusion zone shall be established around each survey vessel. This area will be monitored for marine mammals 60 minutes prior to starting or restarting surveys, during surveys, and 60 minutes after survey equipment has been turned off. The exclusion zone must not be obscured by fog or poor lighting conditions.

(b). Shut down and delay procedures – If a protected species observer sees a marine mammal within or approaching the exclusion zone prior to the start of sound sources, the

observer will notify the appropriate individual who will then be required to delay the start of sound sources or shut down sound sources until the marine mammal moves outside of the exclusion zone or if the animal has not been resighted for 60 minutes. If a protected species observer sees a marine mammal within or approaching the exclusion zone during survey activities, the observer will notify the appropriate individual who will then be required to shut down sound sources until the marine mammal moves outside of the exclusion zone or if the animal has not been resighted for 60 minutes.

(c). Soft-start procedures – A “soft-start” technique for sound sources shall be used at the beginning of survey activities each day (or following a shut down of the sound sources) to allow any marine mammal that may be in the immediate area to leave before the sound sources reach full energy. Sound sources shall not commence at nighttime or when the exclusion zone cannot be effectively monitored.

7. Monitoring Requirements: The Holder of this Authorization is required to implement the following monitoring requirements when conducting the specified activities to result in increased knowledge of the species and of the level of taking or impacts on populations of marine mammals that are expected to be present in the action area.

Visual monitoring – At least one biologically trained, on-site individual, approved in advance by NMFS, shall implement the mitigation measures that require real-time monitoring. Protected species observers (PSOs) shall monitor for marine mammals 60 minutes before, during, and 60 minutes after all survey activities and call for delay or shutdown if any marine mammal is observed approaching or within the 500-m exclusion zone. Should a marine mammal not included in an incidental take authorization be observed at any time within the 500-m exclusion zone, shut down and delay procedures shall be followed.

The Holder shall provide additional monitoring efforts to increase knowledge of marine mammal species in Nantucket Sound. At least one NMFS-approved protected species observer shall conduct behavioral monitoring from the survey vessel for 2 days, every 14 days of survey activity, to estimate take and evaluate the behavioral impacts that survey activities have on marine mammals outside of the 500-m exclusion zone. In addition, a separate vessel with a NMFS-approved protected species observer shall collect data on species presence and behavior before surveys begin and once a month during survey activities.

Protected species observers shall be provided with the equipment necessary to effectively monitor for marine mammals (e.g., high-quality binoculars, compass, and range-finder) in order to determine if animals have entered into the harassment isopleths and to record marine mammal sighting information. Protected species observers must be able to effectively monitor the 500-m exclusion zone whenever the subbottom profilers are in use. Survey efforts shall only take place during daylight hours and visibility must not be obscured by fog, lighting conditions, etc.

8. Reporting Requirements: The Holder of this Authorization is required to:

(a). Submit a report on all activities and monitoring results to the Office of Protected Resources, NMFS, within 90 days of expiration of the IHA or completion of surveying, whichever comes first. This report must contain and summarize the following information:

(i). Dates, times, locations, heading, speed, weather, sea conditions (including Beaufort sea state and wind force), and associated activities during all survey operations and marine mammal sightings;

(ii). Species, number, location, distance from the vessel, and behavior of any marine mammals, as well as associated survey activity (number of shut-downs or delays), observed throughout all monitoring activities.

(iii). An estimate of the number (by species) of marine mammals that are known to have been exposed to the survey activity (based on visual observation) at received levels greater than or equal to 160 dB re 1 μ Pa (rms) and/or 180 dB re 1 μ Pa (rms) for cetaceans and 190 dB re 1 μ Pa (rms) for pinnipeds with a discussion of any specific behaviors those individuals exhibited.

(iv). A description of the implementation and effectiveness of the mitigation measures of the Incidental Harassment Authorization.

(b). Submit a final report to the Chief, Permits and Conservation Division, Office of Protected Resources, NMFS, 1315 East-West Highway, Silver Spring, Maryland, 20910, within 30 days after receiving comments from NMFS on the draft report. If NMFS decides that the draft report needs no comments, the draft report shall be considered the final report.

(c). In the unanticipated event that the survey operations clearly cause the take of a marine mammal in a manner prohibited by this Authorization, such as an injury (Level A harassment), serious injury, or mortality (e.g., ship-strike, gear interaction, and/or entanglement), CWA shall immediately cease survey operations and report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, at 301-427-8401 and/or by email to Jolile.Harrison@noaa.gov and Michelle.Magliocca@noaa.gov and the Northeast Regional Stranding Coordinator (Mendy.Garron@noaa.gov). The report must include the following information:

- (i) Time, date, and location (latitude/longitude) of the incident;
- (ii) The name and type of vessel involved;
- (iii) The vessel's speed during and leading up to the incident;
- (iv) Description of the incident;

- (v) Status of all sound source use in the 24 hours preceding the incident;
- (vi) Water depth;
- (vii) Environmental conditions (e.g., wind speed and direction, Beaufort sea state, cloud cover, and visibility);
- (viii) Description of marine mammal observations in the 24 hours preceding the incident;
- (ix) Species identification or description of the animal(s) involved;
- (x) The fate of the animal(s); and
- (xi) Photographs or video footage of the animal (if equipment is available).

Activities shall not resume until NMFS is able to review the circumstances of the prohibited take. NMFS shall work with CWA to determine what is necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. CWA may not resume their activities until notified by NMFS via letter, email, or telephone.

(d). In the event that CWA discovers an injured or dead marine mammal, and the lead protected species observer determines that the cause of the injury or death is unknown and the death is relatively recent (i.e., in less than a moderate state of decomposition as described in the next paragraph), CWA will immediately report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, at 301-427-8401, and/or by email to Jolile.Harrison@noaa.gov and Michelle.Magliocca@noaa.gov and the Northeast Regional Stranding Coordinator at 978-281-9300 (Mendy.Garron@noaa.gov). The report must include the same information identified in the paragraph above. Activities may continue while NMFS reviews the circumstances of the incident. NMFS will work with CWA to determine whether modifications to the activities are appropriate.

(e). In the event that CWA discovers an injured or dead marine mammal, and the lead protected species observer determines that the injury or death is not associated with or related to the activities authorized in Condition 2 of this Authorization (e.g., previously wounded animal, carcass with moderate to advanced decomposition, or scavenger damage), CWA shall report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, at 301-427-8401, and/or by email to Jolie.Harrison@noaa.gov and Michelle.Magliocca@noaa.gov and the NMFS Northeast Stranding Hotline (866-755-6622) and/or by email to the Northeast Regional Stranding Coordinator (Mendy.Garron@noaa.gov), within 24 hours of the discovery. CWA shall provide photographs or video footage (if available) or other documentation of the stranded animal sighting to NMFS and the Marine Mammal Stranding Network. Activities may continue while NMFS reviews the circumstances of the incident.

10. A copy of this Authorization must be in the possession of all contractors and protected species observers operating under the authority of this Incidental Harassment Authorization.

11. Penalties and Permit Sanctions

Any person who violates any provision of this Incidental Harassment Authorization is subject to civil and criminal penalties, permit sanctions, and forfeiture as authorized under the MMPA.

Request for Public Comments

NMFS requests comment on our analysis, the draft authorization, and any other aspect of the Notice of Proposed IHA for CWA's high resolution geophysical survey. Please include with your comments any supporting data or literature citations to help inform our final decision on CWA's request for an MMPA authorization.

Dated: January 29, 2014.

Donna S. Wieting,
Director,
Office of Protected Resources,
National Marine Fisheries Service.

[FR Doc. 2014-02162 Filed 01/31/2014 at 8:45 am; Publication Date: 02/03/2014]